

# W7-X Logbook REST API for processing metadata and experiment data enrichment at the Wendelstein 7-X stellarator

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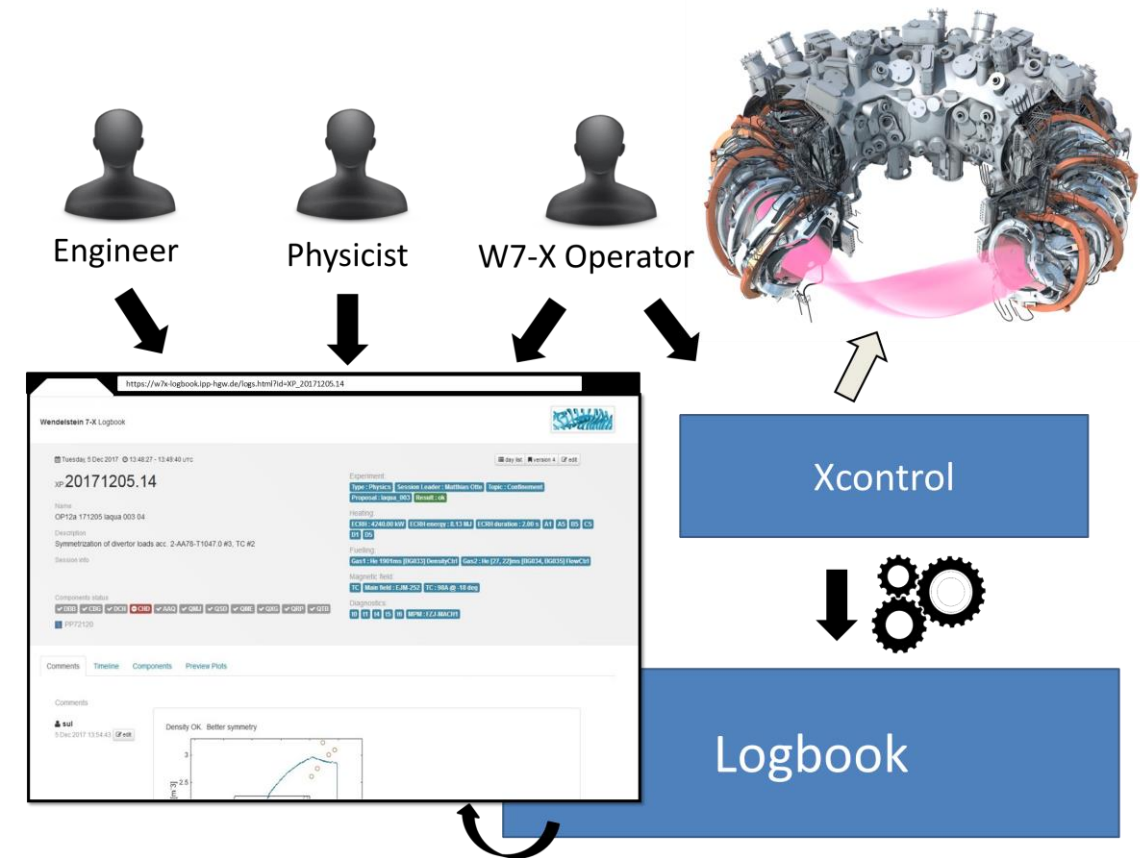


## Wendelstein 7-X

- Complex system with many subsystems
- Large international team
- Large amount of experiment data
- Metadata needed for efficient experiment organization, operation, and data processing

## W7-X Logbook

- New central logbook for the whole W7-X team
- Web browser UI / REST API (HTTP/JSON)
- Allows rich-text comments & contextual metadata
- Initial experiment logs automatically generated (by W7-X control software)
- Fast search index for full-text search and range queries



## Experiences in the first operational phases

- Agile development together with the W7-X team
- REST API allows easy integration into user software & combination with other web services
- Became a crucial tool for W7-X operation & starting point for every analysis / data exploration

QME Electron Cyclotron Emission

Responsible Officer: Mathias Hirsch

Team: Neha Chaudhary, Karsten Ewert, Mathias Hirsch, Udo Hoefel, Hans Oosterbeek, Torsten Richert, Torsten Stange, Mathias Stern, Gavin Weir

ProjectID: P062

Operational Diagnostics

October 2018

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Experiment Program: XP\_20181017.32 d3\_30\_MW

Main field: 3.3M+252 CCRH: 6070.00 kW MFM: RFX-HRP1 Type: Physics

Component log: pulse extension: 30M3@6MW

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